

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 3, 8, 9, 11, 13, 14, 18-20, and 22, and cancel claim 21 without prejudice or disclaimer of its subject matter, as follows:

1 1. (currently amended) An electron gun for a color cathode ray tube, the gun
2 comprising:
3 a cathode emitting an electron beam;
4 a control electrode having first hole regions, each one of the first hole regions including
5 a first vertically elongated indented portion formed at an output side surface of said control
6 electrode and including a first hole portion formed in the first indented portion, the electron
7 beam passing through said control electrode , the first hole portion having a shape selected from
8 among circular and elongated ;
9 a screen electrode being installed adjacent to said control electrode, said screen electrode
10 having second hole regions; and
11 a plurality of focusing electrodes being sequentially installed from said screen electrode.

1 2. (original) The electron gun of claim 1, the first vertically elongated indented
2 portion being rectangular.

1 3. (currently amended) The electron gun of claim 2, ~~the first hole portion having one~~

2 ~~shape selected from among circular and vertically elongated,~~ the first hole portion with the
3 circular shape having vertical and horizontal widths equal to each other, the first hole portion
4 with the ~~vertically~~ elongated shape having a vertical width and a horizontal width with the
5 vertical width being greater than the horizontal width.

1 4. (original) The electron gun of claim 3, each one of the second hole regions
2 having one shape selected from among circular and vertically elongated .

1 5. (original) The electron gun of claim 3, each one of the second hole regions
2 including a second indented portion formed at an output side surface of said screen electrode and
3 a second hole portion formed in the second indented portion, the electron beam passing through
4 the second hole portion.

1 6. (original) The electron gun of claim 5, the second indented portion having one
2 shape selected from among circular and vertically elongated.

1 7. (original) The electron gun of claim 6, the second hole portion having one
2 shape selected from among circular and vertically elongated, the circular second hole portion
3 having vertical and horizontal widths equal to each other, the vertically elongated second hole
4 portion having a vertical width greater than a horizontal width.

1 8. (currently amended) The electron gun of claim 2, the first hole portion with the
2 elongated shape corresponding to a first hole portion having a ~~having one shape selected from~~
3 ~~among circular and rectangular~~ shape , ~~the circular first hole portion having vertical and~~
4 ~~horizontal widths equal to each other, the rectangular first hole portion having a vertical width~~
5 ~~greater than a horizontal width~~.

1 9. (currently amended) The electron gun of claim 1, the first hole portion with the
2 elongated shape corresponding to a first hole portion having a ~~having one shape selected from~~
3 ~~among circular and rectangular~~ shape , ~~the circular first hole portion having vertical and~~
4 ~~horizontal widths equal to each other, the rectangular first hole portion having a vertical width~~
5 ~~greater than a horizontal width~~.

1 10. (original) The electron gun of claim 1, each one of the second hole regions
2 having one shape selected from among circular and vertically elongated.

1 11. (currently amended) An electron gun for a color cathode ray tube, the gun
2 comprising:
3 a cathode emitting an electron beam;
4 a control electrode having first hole regions, each one of the first hole regions including
5 a first vertically elongated indented portion formed at an output side surface of said control
6 electrode and including a first hole portion formed in the first indented portion, the electron

7 beam passing through said control electrode ;

8 a screen electrode being installed adjacent to said control electrode, said screen electrode
9 having second hole regions; and

10 a plurality of focusing electrodes being sequentially installed from said screen electrode

11 ~~The electron gun of claim 1~~, each one of the second hole regions including a second indented
12 portion formed at an output side surface of said screen electrode and a second hole portion
13 formed in the second indented portion, the electron beam passing through the second hole
14 portion.

B' Contd
1 12. (original) The electron gun of claim 11, the second hole portion having one
2 shape selected from among circular and vertically elongated, the circular second hole portion
3 having vertical and horizontal widths equal to each other, the vertically elongated second hole
4 portion having a vertical width greater than a horizontal width.

1 13. (currently amended) An electron gun for a color cathode ray tube, the gun
2 comprising:

3 a cathode emitting an electron beam;

4 a control electrode having first hole regions, each one of the first hole regions including
5 a first vertically elongated indented portion formed at an output side surface of said control
6 electrode and including a first hole portion formed in the first indented portion, the electron
7 beam passing through said control electrode, the first hole portion having one shape selected

8 from among circular, elongated , and square;

9 a screen electrode being installed adjacent to said control electrode, said screen electrode
10 having second hole regions; and

11 a plurality of focusing electrodes forming a plurality of quadrupole lenses, said focusing
12 electrodes being sequentially installed from said screen electrode and respectively forming
13 electron beam passing holes having a predetermined shape.

14. (currently amended) An electron gun for a color cathode ray tube, the gun
comprising:

3 a cathode emitting an electron beam;

4 a control electrode having first hole regions, each one of the first hole regions including
5 a first vertically elongated indented portion formed at an output side surface of said control
6 electrode and including a first hole portion formed in the first indented portion, the electron
7 beam passing through said control electrode;

8 a screen electrode being installed adjacent to said control electrode, said screen electrode
9 having second hole regions; and

10 a plurality of focusing electrodes forming a plurality of quadrupole lenses, said focusing
11 electrodes being sequentially installed from said screen electrode and respectively forming
12 electron beam passing holes having a predetermined shape ~~The electron gun of claim 13~~, said
13 focusing electrodes comprising:

14 first, second, and third focusing electrodes, respectively having electron beam passing

holes forming a predetermined shape;

a fourth focusing electrode being installed adjacent to said third focusing electrode, said fourth focusing electrode forming a first quadrupole lens; and

a fifth focusing electrode being installed adjacent to said fourth focusing electrode, said fifth focusing electrode forming a second quadrupole lens.

15. (original) The electron gun of claim 14, further comprising a final acceleration electrode being installed adjacent to said fifth focusing electrode, said final acceleration electrode forming a main lens.

B' contd
16. (original) The electron gun of claim 15, said third and fourth focusing electrodes each having output side surfaces forming vertically elongated electron beam passing holes, said fourth and fifth focusing electrodes each having input side surfaces forming horizontally elongated electron beam passing holes, a constant voltage being applied to said screen electrode and said second focusing electrode, a focusing voltage higher than the constant voltage being applied to said first focusing electrode and said fourth focusing electrode, a dynamic focusing voltage using the focusing voltage as a base voltage being applied to said third and fifth focusing electrodes.

17. (original) The electron gun of claim 16, each one of the second hole regions including a second indented portion formed at an output side surface of said screen electrode and

a second hole portion formed in the second indented portion, the electron beam passing through the second hole portion.

18. (currently amended) An electron gun for a color cathode ray tube, the gun comprising:
a cathode emitting an electron beam;
a control electrode having first hole regions, each one of the first hole regions including a first vertically elongated indented portion formed at an output side surface of said control electrode and including a first hole portion formed in the first indented portion, the electron beam passing through said control electrode ~~The electron gun of claim 1~~, the first hole portion having one shape selected from among circular, ~~vertically~~ elongated, and square;
a screen electrode being installed adjacent to said control electrode, said screen electrode having second hole regions; and
a plurality of focusing electrodes being sequentially installed from said screen electrode.

19. (currently amended) An electron gun for a color cathode ray tube, the gun comprising:
a cathode emitting an electron beam;
a control electrode having first hole regions, each one of the first hole regions including a first elongated indented portion formed at an output side surface of said control electrode and including a first hole portion formed in the first indented portion, the electron beam passing

7 through said control electrode;

8 a screen electrode being installed adjacent to said control electrode, said screen electrode
9 having second hole regions; and

10 a first plurality of focusing electrodes forming a plurality of quadrupole lenses, said first
11 plurality of focusing electrodes being sequentially installed from said screen electrode and
12 respectively forming electron beam passing holes, said first plurality of focusing electrodes
13 comprising:

14 a second plurality of focusing electrodes, respectively having electron beam
15 passing holes;

16 an additional focusing electrode being installed adjacent to said second plurality
17 of focusing electrodes, said additional focusing electrode forming a first quadrupole lens;

18 and

19 a next focusing electrode being installed adjacent to said additional focusing
20 electrode, said next focusing electrode forming a second quadrupole lens ~~The electron~~
21 ~~gun of claim 13, the first hole portion having one shape selected from among circular,~~
22 ~~vertically elongated, and square.~~

1 20. (currently amended) An apparatus emitting electron beams, the apparatus
2 comprising:

3 at least two cathodes emitting electron beams, said at least two cathodes being arranged
4 substantially in a horizontal line; and

5 a control electrode having first hole regions, each one of the first hole regions including
6 a first vertically elongated indented portion formed at an output side surface of said control
7 electrode and including a first hole portion formed in the first indented portion, at least one of
8 the electron beams passing through said control electrode, the first hole portion having one shape
9 selected from among circular, elongated, and square.

1 21. (canceled)

1 22. (currently amended) An apparatus emitting electron beams, the apparatus
2 comprising:

B' control
3 at least two cathodes emitting electron beams, said at least two cathodes being arranged
4 substantially in a horizontal line;

5 a control electrode having first hole regions, each one of the first hole regions including
6 a first vertically elongated indented portion formed at an output side surface of said control
7 electrode and including a first hole portion formed in the first indented portion, at least one of
8 the electron beams passing through said control electrode; and ~~The apparatus of claim 20, further~~
9 comprising:

10 a screen electrode being installed adjacent to said control electrode, said screen electrode
11 having second hole regions, each one of the second hole regions including a second indented
12 portion formed at an output side surface of said screen electrode and a second hole portion
13 formed in the second indented portion, at least one of the electron beams passing through the

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*cont'd*¹⁴ second hole portion.

